

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of the claims:**

1. (Cancelled)
2. (Currently amended): A method for enhancing the function of normal or ~~abnormal~~ damaged excitable tissue in a mammal, comprising administering peripherally to ~~said a~~ mammal in need thereof a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, wherein said enhancing the function of excitable tissue results in the enhancement of associative learning or memory.
3. (Currently amended): A method for enhancing the function of normal or ~~abnormal~~ damaged excitable tissue in a mammal, comprising administering peripherally to ~~said a~~ mammal in need thereof a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, ~~The method of Claim 1~~ wherein said enhancing the function of excitable tissue is used in the treatment of cognitive dysfunction.
4. (Currently amended): A method for enhancing the function of normal or ~~abnormal~~ damaged excitable tissue in a mammal, comprising administering peripherally to ~~said a~~ mammal in need thereof a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, wherein said excitable tissue is central nervous system tissue or peripheral nervous system tissue.
5. (Currently amended): A method for enhancing the function of normal or ~~abnormal~~ damaged excitable tissue in a mammal, comprising administering peripherally to ~~said a~~ mammal in need thereof a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, wherein said administration comprises oral, topical, intraluminal or by inhalation or parenteral administration.
6. (Original): The method of Claim 5 wherein said parenteral administration is intravenous.
7. (Currently amended): A method for enhancing the function of normal or ~~abnormal~~ damaged excitable tissue in a mammal, comprising administering peripherally to ~~said a~~ mammal in need thereof a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, wherein said enhancing the function of excitable tissue results in the enhancement of associative learning or memory.

mammal in need thereof a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, wherein said administration is acute or chronic.

8. (Cancelled)

9. (Currently amended): A method for enhancing the function of normal or ~~abnormal~~ damaged excitable tissue in a mammal, comprising administering peripherally to ~~said a~~ mammal in need thereof comprising administering peripherally to said mammal a peripherally effective, non-toxic, excitable tissue enhancing amount of recombinant EPO, wherein said EPO is administered at a dose greater than the dose necessary to maximally stimulate erythropoiesis.

10. (Cancelled)

11. (Cancelled)